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January 18, 2019

The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
The Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia SC 29210

Re: **Application of Duke Energy Carolinas, LLC for Adjustments in Electric Rate Schedules and Tariffs and Request for Accounting Order**
Docket No.: 2018-319-E

Dear Mrs. Boyd:

Enclosed for filing please find copies of Duke Energy Carolinas LLC's Errata to the Application and Direct Testimony of Jon F. Kerin and Christopher M. Fallon. This filing includes 1) an Errata detailing the changes to the testimony; and 2) replacement pages of the corrected testimony for ease of the Commission, the Office of Regulatory Staff and other parties.

Please do not hesitate to contact me if you have any questions or require any further information.

Sincerely,

Heather Shirley Smith

Heather Shirley Smith

Enclosure

cc: Nanette Edwards, Esq., Office of Regulatory Staff
Dawn Hipp, Office of Regulatory Staff
Jeffrey M. Nelson, Esq., Office of Regulatory Staff
Ms. Carri Grube Lybarker, Esq., SC Department of Consumer Affairs
Ms. L. Becky Dover, Esq., SC Department of Consumer Affairs
Service List

BEFORE
THE PUBLIC SERVICE COMMISSION
OF SOUTH CAROLINA

DOCKET NO. 2018-319-E

In the Matter of:	)	
	)	**APPLICATION OF DUKE ENERGY**
Application of Duke Energy Carolinas,	)	**CAROLINAS, LLC FOR**
LLC for Adjustments in Electric Rate	)	**ADJUSTMENTS IN ELECTRIC**
Schedules and Tariffs	)	**RATE SCHEDULES AND TARIFFS**
	)	**AND REQUEST FOR AN**
	)	**ACCOUNTING ORDER**

increasing the rate schedules as follows: 12.1 percent for the residential class, 8.8 percent for the general service/lighting class, and 4.1 percent for the industrial class. The different percentage increases for customer classes reflect the allocation of the rate increase based on the overall rate of return. The Company proposes to modify certain rate schedules to reflect more accurately the cost of service and to consolidate and cancel certain rate schedules.

50. The rates set forth in **Exhibit A** are unjust and unreasonable because they do not allow the Company the opportunity to earn a fair rate of return. In Order No. 2013-661, the rates were set based on a 10.2 percent return on common equity. The overall rate of return on rate base was set at 7.89 percent. During the twelve month period ended December 31, 2017, as adjusted for known changes, the rate of return on South Carolina retail rate base, as shown on **Exhibit D**, was only 4.64 percent.

51. The exhibits attached to this Application are as follows:

- **Exhibit A**. The schedule of the Company's electric rates and charges in effect and on file with the Commission at the time of filing this Application, which the Company seeks to increase.
- **Exhibit B**. The schedules of electric rates and charges the Company proposes to put into effect on June 1, 2019.
- **Exhibit C**. Current tariffs highlighting all changes requested in the proposed schedules.
- **Exhibit D**. The financial data for the 12-month period ended December 31, 2017 filed in compliance with 26 S.C. Code Ann. Regs. 103-823.
- **Exhibit E**. The schedules of Phase 1 and Phase 2 rate changes to reflect rate changes to recover known and measurable costs being incurred for the proposed Grid Improvement Plan.

DE Carolinas proposes that all accounting and pro forma adjustments set forth in the attached exhibits be adopted in this proceeding for ratemaking and reporting purposes.

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA

DOCKET NO. 2018-319-E

In the Matter of:	)	
	)	**DIRECT TESTIMONY OF**
Application of Duke Energy Carolinas, LLC	)	**CHRISTOPHER M. FALLON**
For Adjustments in Electric Rate Schedules and	)	**FOR DUKE ENERGY**
Tariffs	)	**CAROLINAS, LLC**

Category of Cost	Dollars Expended through 09/30/18 on System-Wide Basis*
COLA Preparation	$25 Million
NRC Review and Hearing Fees	$110 Million
Land and Right-of-Way Purchases	$44 Million
Pre-construction and Site Preparation	$48 Million
Supply Chain, Construction Planning, and Detailed Engineering	$53 Million
Operational Planning	$5 Million
Post COL	$2 Million
Allocate†	$23 Million
AFUDC	$248 Million
Total	$559 Million

*Details may not add to total due to rounding. The South Carolina allocable share is approximately 24 percent.
†Includes $638,479 for COL maintenance and project close-out in 2017-18.

Company witness Kim H. Smith describes the rate treatment, including the proposed amortization schedule, in her direct testimony filed in this case.

Q. PLEASE DESCRIBE THE COSTS INCURRED AS PART OF THE COLA PREPARATION CATEGORY.

A. This category includes costs related to DE Carolinas labor, expenses and contract support for preparation of the COLA tendered to the NRC on December 13, 2007. The NRC determined the application was suitable for review and docketed the application on February 25, 2008.

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA

DOCKET NO. 2018-319-E

IN THE MATTER OF:

Application of Duke Energy Carolinas, LLC For Adjustments in Electric Rate Schedules and Tariffs	))))	**DIRECT TESTIMONY OF JON F. KERIN FOR DUKE ENERGY CAROLINAS, LLC**

Q. HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?

A. Yes. I filed direct testimony regarding CCR issues in Duke Energy Progress, LLC's ("DE Progress") rate case in South Carolina in Docket 2016-227-E and appeared before the Public Service Commission of South Carolina in October 2016 in connection with that case. I also filed direct and rebuttal testimony regarding CCR issues in DE Progress' and DE Carolinas' recent North Carolina rate cases in Docket Nos. E-2, Sub 1142 and E-7, Sub 1146, respectively, and testified before the North Carolina Utilities Commission in connection with those cases.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. DE Carolinas is seeking recovery of CCR expenses incurred from January 2015 through September 2018 and estimated costs to be incurred October 2018 through December 2018 related to compliance with applicable regulatory requirements. The purpose of my testimony is to explain those regulatory requirements and to explain how our compliance actions and decisions, including our current plans to meet existing legal requirements, have been and continue to be reasonable, prudent, and cost-effective approaches to comply with those regulatory requirements.

Q. PLEASE BRIEFLY SUMMARIZE YOUR TESTIMONY.

A. DE Carolinas has become subject to both federal and state regulatory requirements that mandate closure of its ash basins and other ash storage areas. Since the early 1900s, DE Carolinas has disposed of CCR in compliance with then-current regulatory requirements and industry practices. Until the 1950s,

Accordingly, the Company is requesting recovery of the incremental compliance costs related to coal ash pond closures incurred starting January 2015 through September 2018 and expected compliance costs from October 2018 through December 2018 as explained in more detail by Company Witness Smith. My testimony and exhibits demonstrate that both these incurred and expected compliance costs are reasonable, prudent, and cost-effective given the individual facts and circumstances at each power plant and ash basin site at issue.[2]

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. In this Section I, I have provided information concerning my background and the purpose of my testimony. In Section II, I provide an overview of the generation resources, including coal-fired generation, that the Company has used to reliably and efficiently serve customers for over 100 years of its existence. I explain that CCR are the natural byproduct of burning coal to generate electricity. I discuss the Company's past practices for the storage and disposal of CCR, and I explain that its practices have been in accordance with the electric power industry's prudent standards and applicable laws, regulations, and permit requirements as they have existed over time. In Section III, I discuss the new requirements imposed on the Company under the new CCR compliance requirements. In Section IV, I discuss the Company's plans to comply with the CCR compliance requirements, the required regulatory approvals and permits for DE Carolinas' compliance plans, including timing and implementation issues, and costs incurred to date and expected over the next several years. I also explain and demonstrate

[2] This case excludes any fines or penalties incurred by DE Carolinas related to ash basin closure or management.

how each of the Company's historical and ongoing CCR compliance costs are reasonable, prudent, and cost-effective given the individual facts and circumstances at each power plant and ash basin site at issue.

Q. ARE YOU PROVIDING ANY EXHIBITS WITH YOUR TESTIMONY?

A. Yes, I have attached 10 total exhibits, described below, as well as an appendix:

Kerin Exhibit 1: Statutes and Regulations (listing of relevant coal ash environmental regulations);

Kerin Exhibit 2: CCR Rule (text of the Federal CCR Rule);

Kerin Exhibit 3: Site Locations NC and SC (map of coal ash facilities);

Kerin Exhibit 4: Site Facts (site-specific background information);

Kerin Exhibit 5: Ash Basin Information (site-specific information about ash units)

Kerin Exhibit 6: Responses to Rule Changes Through the Decades DEC (summary of DE Carolinas' compliance with evolving environmental regulations);

Kerin Revised Exhibit 7: Beneficiation Year 2015 thru September 2018 (summary of beneficiation at DE Carolinas Sites);

Kerin Exhibit 8: Graphics Cap-in-Place and Landfill (graphical depiction of cap-in-place and landfill closure methodologies);

Kerin Exhibit 9: Closure Plans (site-specific closure plans and engineering reports); and

Kerin Revised Exhibit 10: Components of 2016-2018 Recovery Request (summary of costs and regulatory drivers relevant to DE Carolinas' application).

settling, and/or retention functions for other power plant process water flows, such as low volume wastewater, coal pile run-off, landfill leachate, and FGD wastewater. Additionally, all plant discharges will be rerouted away from ash basins at retired and active sites.

DE Carolinas has also historically pursued opportunities to sell ash for beneficial reuse and will continue to do so as feasible. As the regulatory requirements for ash reuse tightened, the Company limited its sale of ash to situations in which compliance could be carefully monitored and to encapsulated uses.

In summary, beyond the storage of fly ash and/or bottom ash, the operation of ash basins has historically evolved to accept new CCR flows resulting from FGD modifications required to address air emissions and also to accept other non-CCR process flows, such as coal pile run-off and low volume wastewater. The construction and use of the ash basins is the final step in the generation process that has resulted in reliable, efficient, coal-fired electricity in the Carolinas for many decades.

Q. IS THERE ANY FUTURE FOR BENEFICIAL REUSE OF CCRs?

A. Yes. As referenced above, Duke Energy has endeavored across its coal-fired generating fleet to maximize the beneficial use of production ash and to reclaim, where possible, stored ash for sale for beneficial use. Ash beneficiation for DE Carolinas began in 1986/1987 at Belews Creek, selling ash for the cement industry. From January 2016 through September 2018, 38 percent of the DE Carolinas fleet production ash, or approximately 941,000 tons, was sold for

Q. HAS THE COMPANY IDENTIFIED ANY COSTS THAT IT WILL NOT BE SEEKING FROM SOUTH CAROLINA CUSTOMERS?

A. Yes. The Company will not be seeking from South Carolina customers certain costs that are associated with the provision of drinking water to North Carolina residents. These costs include the provision of bottled water and permanent drinking water supplies, *e.g.*, connection to a public water supply or filtration systems. The Company has decided to absorb the share of these costs that the North Carolina Utilities Commission ordered should be allocated to South Carolina.

Q. HOW, IF AT ALL, DO THE COMPANY'S HISTORICAL CCR PRACTICES IMPACT THE COMPLIANCE COSTS THAT DE CAROLINAS IS SEEKING IN THIS PROCEEDING?

A. They do not affect them at all. I make clear in prior sections of my testimony that DE Carolinas' historical handling of CCRs was reasonable, prudent, and consistent with industry standards over time. These facts are important to show that nothing that DE Carolinas has done historically is causing the Company to incur any unjustified costs today to comply with coal ash regulatory requirements.

Q. REGARDING THE ASH POND CLOSURE COSTS ALREADY INCURRED OR EXPECTED TO BE INCURRED PRIOR TO DECEMBER 2018, WHAT DO THOSE COSTS COMPRISE AND WHY ARE THEY REASONABLE AND PRUDENT COSTS?

A. In Kerin Revised Exhibit 10, I have broken these costs down into their core components and have described the plants to which these costs apply. In detailing

Duke Energy Corporation
Summary of Ash Beneficiation for Duke Energy Carolinas
2015 , 2016, 2017 and 2018 January to September

2015	DEC
Ash Produced	973,264
Production Ash Reused	375,934
Ash Sluiced	135,912
Ash Landfilled	781,320
Ash to Structural Fill	-
Reclaimed Ash for Beneficial Reuse	-
2016	**DEC**
Ash Produced	945,854
Production Ash Reused	362,050
Ash Sluiced	156,584
Ash Landfilled	748,803
Ash to Structural Fill	20,997
Reclaimed Ash for Beneficial Reuse	-
2017	**DEC**
Ash Produced	895,849
Production Ash Reused	346,900
Ash Sluiced	96,081
Ash Landfilled	720,772
Ash to Structural Fill	-
Reclaimed Ash for Beneficial Reuse	-
2018	**DEC**
Ash Produced	639,714
Production Ash Reused	208,604
Ash Sluiced	43,591
Ash Landfilled	624,813
Ash to Structural Fill	2,927
Reclaimed Ash for Beneficial Reuse	-

DEC - 2018	January	February	March	April	May	June	July	August	September	October	November	December	YTD
ALLEN STATION													
DRY FLY ASH PRODUCED	13,160.32	284.45	0.00	217.82	2,844.53	4,286.40	882.86	1,569.10	5,622.72	0.00	0.00	0.00	28,868.19
DRY BOTTOM ASH PRODUCED	1,668.21	36.06	0.00	27.61	360.57	543.35	111.91	198.90	712.74	0.00	0.00	0.00	3,659.35
TOTAL ASH PRODUCED	14,828.52	320.50	0.00	245.43	3,205.11	4,829.74	994.77	1,768.00	6,335.46	0.00	0.00	0.00	32,527.53
ASH SLUICED TO POND	1,668.21	36.06	0.00	27.61	360.57	543.35	111.91	198.90	712.74	0.00	0.00	0.00	3,659.35
ASH LANDFILLED *	21,499.93	904.99	0.00	0.00	4,439.61	4,330.03	1,533.75	957.72	5,500.64	0.00	0.00	0.00	39,166.67
CENOSPHERES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ASH BENEFICIAL REUSE	16.40	0.00	0.00	0.00	0.00	0.00	13.80	0.00	0.00	0.00	0.00	0.00	30.20
STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED TO STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TEMPORARY ASH STORAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BELEWS CREEK STATION													
DRY FLY ASH PRODUCED	40,175.40	7,400.16	22,950.20	650.82	29,213.17	31,544.11	25,169.87	29,198.62	19,973.89	0.00	0.00	0.00	206,276.24
DRY BOTTOM ASH PRODUCED	5,092.66	938.05	2,909.18	82.50	3,703.08	3,998.55	3,190.55	3,701.23	2,531.90	0.00	0.00	0.00	26,147.69
TOTAL ASH PRODUCED	45,268.06	8,338.21	25,859.38	733.32	32,916.25	35,542.66	28,360.42	32,899.85	22,505.79	0.00	0.00	0.00	232,423.94
ASH SLUICED TO POND	5,092.66	938.05	2,909.18	82.50	3,703.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12,725.46
ASH LANDFILLED *	18,502.55	431.13	0.00	25.17	9,639.52	14,859.13	6,242.89	7,710.43	3,017.04	0.00	0.00	0.00	60,427.86
CENOSPHERES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ASH BENEFICIAL REUSE	14,926.42	23,536.85	12,241.06	13,549.26	17,749.58	23,845.10	24,553.02	27,792.31	16,515.41	0.00	0.00	0.00	174,709.01
STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TEMPORARY ASH STORAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLIFFSIDE STATION													
DRY FLY ASH PRODUCED	21,466.11	9,500.75	13,764.27	11,322.83	9,955.50	17,673.16	17,807.84	14,014.92	15,589.66	0.00	0.00	0.00	131,095.04
DRY BOTTOM ASH PRODUCED	2,414.94	1,068.83	1,548.48	1,273.82	1,119.99	1,988.23	2,003.38	1,576.68	1,753.84	0.00	0.00	0.00	14,748.19
TOTAL ASH PRODUCED	21,466.11	9,500.75	13,764.27	11,322.83	9,955.50	17,673.16	17,807.84	14,014.92	15,589.66	0.00	0.00	0.00	131,095.04
ASH SLUICED TO POND	900.95	267.64	284.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,453.10
ASH LANDFILLED *	33,192.08	22,715.77	21,350.74	22,743.95	20,581.36	30,865.75	32,403.35	25,969.41	23,827.62	0.00	0.00	0.00	233,650.03
CENOSPHERES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ASH BENEFICIAL REUSE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
STRUCTURAL FILL ASH	2,927.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,927.28
RECLAIMED ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TEMPORARY ASH STORAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MARSHALL STATION													
DRY FLY ASH PRODUCED	28,998.83	10,156.10	17,301.55	22,519.73	22,144.80	26,480.77	22,008.85	23,633.68	29,921.49	0.00	0.00	0.00	203,165.81
DRY BOTTOM ASH PRODUCED	3,675.91	1,287.39	2,193.15	2,854.61	2,807.09	3,356.72	2,789.85	2,995.82	3,792.86	0.00	0.00	0.00	25,753.41
TOTAL ASH PRODUCED	32,674.74	11,443.49	19,494.71	25,374.34	24,951.89	29,837.49	24,798.71	26,629.50	33,714.35	0.00	0.00	0.00	228,919.22
ASH SLUICED TO POND	3,675.91	1,287.39	2,193.15	2,854.61	2,807.09	3,356.72	2,789.85	2,995.82	3,792.86	0.00	0.00	0.00	25,753.41
ASH LANDFILLED *	46,024.39	14,083.86	26,029.68	28,176.24	30,376.85	37,289.93	33,020.90	38,846.08	37,720.27	0.00	0.00	0.00	291,568.20
Fly Ash Sales	179.71	503.24	2,026.39	4,616.26	3,337.12	848.24	0.00	999.93	1,763.80	0.00	0.00	0.00	14,274.69
ASH BENEFICIAL REUSE	2,453.43	3,259.54	3,217.90	3,590.24	1,954.65	2,682.67	1,915.20	383.27	133.06	0.00	0.00	0.00	19,589.96
STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TEMPORARY ASH STORAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Ash Produced	**639,714**	**percent reuse**	**33%**
Production Ash Reused	**208,604**		
Ash Sluiced	43,591		

Ash Landfilled	624,813
Ash to Structural Fill	2,927
Reclaimed Ash for Beneficial Reuse	0

DEP - 2018													
ASHEVILLE STATION													
DRY FLY ASH PRODUCED	6,023.16	3,286.44	3,786.77	4,309.87	1,873.43	3,733.89	2,562.80	3,121.23	6,575.05	0.00	0.00	0.00	35,272.64
DRY BOTTOM ASH PRODUCED	763.50	416.59	480.01	546.32	237.48	473.31	324.86	395.65	833.46	0.00	0.00	0.00	4,471.18
TOTAL ASH PRODUCED	6,786.66	3,703.03	4,266.78	4,856.20	2,110.90	4,207.20	2,887.66	3,516.88	7,408.51	0.00	0.00	0.00	39,743.82
ASH SLUICED TO POND	6,786.66	3,703.03	4,266.78	4,856.20	2,110.90	4,207.20	2,887.66	3,516.88	7,408.51	0.00	0.00	0.00	39,743.82
ASH LANDFILLED *	61,572.00	66,951.00	74,475.00	73,943.00	73,114.00	69,176.00	68,529.00	71,109.00	57,539.00	0.00	0.00	0.00	616,408.00
CENOSPHERES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ASH BENEFICIAL REUSE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED TO STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TEMPORARY ASH STORAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MAYO STATION													
DRY FLY ASH PRODUCED	11,012.93	2,673.05	3,585.49	7,060.44	5,054.10	7,246.97	5,802.37	5,850.37	2,181.39	0.00	0.00	0.00	50,467.12
DRY BOTTOM ASH PRODUCED	1,396.01	338.84	454.50	894.99	640.66	918.63	735.51	741.60	276.51	0.00	0.00	0.00	6,397.24
TOTAL ASH PRODUCED	12,408.94	3,011.89	4,039.99	7,955.43	5,694.76	8,165.60	6,537.88	6,591.97	2,457.91	0.00	0.00	0.00	56,864.36
ASH SLUICED TO POND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ASH LANDFILLED *	13,368.25	4,690.68	2,989.12	7,635.11	8,231.33	9,615.10	7,131.25	6,677.87	3,413.51	0.00	0.00	0.00	63,752.22
CENOSPHERES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ASH BENEFICIAL REUSE	25.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.22
STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED ASH TO STRUCTURAL FILL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TEMPORARY ASH STORAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROXBORO STATION													
DRY FLY ASH PRODUCED	33,660.35	8,685.34	10,757.48	6,830.21	11,806.80	26,646.24	22,806.21	27,137.66	18,403.82	0.00	0.00	0.00	166,734.11
DRY BOTTOM ASH PRODUCED	4,266.80	1,100.96	1,363.62	865.80	1,496.64	3,377.69	2,890.93	3,439.98	2,332.88	0.00	0.00	0.00	21,135.31
TOTAL ASH PRODUCED	37,927.15	9,786.29	12,121.11	7,696.02	13,303.44	30,023.93	25,697.13	30,577.64	20,736.70	0.00	0.00	0.00	187,869.42
ASH SLUICED TO POND	4,266.80	1,100.96	1,363.62	865.80	1,496.64	3,377.69	2,890.93	3,439.98	2,332.88	0.00	0.00	0.00	21,135.31
ASH LANDFILLED *	46,123.36	13,824.89	0.00	0.00	39.00	1,993.69	28,910.70	6,308.50	0.00	0.00	0.00	0.00	97,200.14
CENOSPHERES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ASH BENEFICIAL REUSE	9,474.32	20,580.87	20,325.65	9,797.48	12,372.67	34,343.49	4,148.71	38,685.98	4,118.34	0.00	0.00	0.00	153,847.51
STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED ASH TO STRUCTURAL FILL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TEMPORARY ASH STORAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

DEP			
Ash Produced	**284,478**	**percent reuse**	**54%**
Production Ash Reused	**153,873**		

Ash Sluiced	117,743
Ash Landfilled	777,360
Ash to Structural Fill	0
Reclaimed Ash for Beneficial Reuse	0

Combined **924,192** **percent reuse** **39%**
Production Ash Reused **362,477**

DEP & DEC	Total CCP Produced	336,469	103,577	166,874	125,970	193,013	277,643	243,537	252,248	223,794	1,923,124
	Total CCP Reused	115,879	119,340	128,544	125,684	142,190	159,601	123,971	162,592	115,892	1,193,691
	% Ash Reuse	29%	136%	80%	104%	74%	71%	59%	91%	33%	66%
	% Gypsum Reuse	54%	124%	104%	139%	106%	66%	68%	70%	81%	82%
	% Total CCP Reuse	34%	115%	77%	100%	74%	57%	51%	64%	52%	62%

2018 CCP September Utilization Station Health

* Ash Landfilled represent the moist tons of CCR's weighed and placed in the landfills monthly.

DEC - 2017	January	February	March	April	May	June	July	August	September	October	November	December	YTD
ALLEN STATION													
DRY FLY ASH PRODUCED	5,957.59	265.33	1,302.32	1,969.70	1,853.17	1,405.60	9,522.30	4,938.00	5,074.20	4,642.83	61.82	1,912.35	38,858.33
DRY BOTTOM ASH PRODUCED	1,489.40	66.33	325.58	492.43	463.29	351.40	2,380.58	1,234.50	1,268.55	1,160.71	15.45	478.09	9,714.58
TOTAL ASH PRODUCED	7,446.99	331.67	1,627.90	2,462.13	2,316.46	1,756.99	11,902.88	6,172.50	6,342.75	5,803.54	77.27	2,390.44	48,572.92
ASH SLUICED TO POND	1,489.40	66.33	325.58	492.43	463.29	351.40	2,380.58	1,234.50	1,268.55	1,160.71	15.45	478.09	9,714.58
ASH LANDFILLED *	11,109.86	0.00	0.00	0.00	0.00	3,429.37	15,127.94	6,209.12	9,170.28	7,277.13	445.23	1,582.91	54,351.84
CENOSPHERES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ASH BENEFICIAL REUSE	0.00	0.00	0.00	0.00	0.00	0.00	11.00	8.40	16.00	0.00	7.00	0.00	42.40
STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED TO STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TEMPORARY ASH STORAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BELEWS CREEK STATION													
DRY FLY ASH PRODUCED	17,294.87	5,609.64	36,029.14	36,213.95	35,287.89	38,204.68	46,697.95	42,290.07	14,735.02	8,312.78	12,791.37	25,680.51	316,764.98
DRY BOTTOM ASH PRODUCED	2,137.57	693.33	4,453.04	4,475.88	4,361.42	4,721.93	5,771.66	5,226.86	1,821.18	1,027.42	1,580.96	3,174.00	39,150.73
TOTAL ASH PRODUCED	19,432.44	6,302.96	40,482.18	40,689.83	39,649.31	42,926.61	52,469.60	47,516.93	16,556.20	9,340.21	14,372.33	28,854.51	355,915.70
ASH SLUICED TO POND	2,137.57	693.33	4,453.04	4,475.88	4,361.42	4,721.93	5,771.66	5,226.86	1,821.18	1,027.42	1,580.96	3,174.00	39,150.73
ASH LANDFILLED *	1,811.88	0.00	0.00	4,078.79	0.00	2,751.48	9,648.96	10,089.52	1,286.10	1,797.77	1,283.65	934.39	36,967.44
CENOSPHERES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ASH BENEFICIAL REUSE	18,561.31	13,184.26	15,256.10	29,149.77	39,396.99	44,077.97	36,172.89	38,594.58	26,987.54	12,504.09	7,707.05	14,509.64	296,860.70
STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TEMPORARY ASH STORAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLIFFSIDE STATION													
DRY FLY ASH PRODUCED	18,402.12	11,325.73	11,598.71	17,842.57	13,817.34	12,358.88	19,777.55	13,030.61	12,062.26	12,976.17	5,848.19	6,080.96	153,631.57
DRY BOTTOM ASH PRODUCED	2,749.74	1,692.35	1,733.14	2,666.13	2,064.66	1,846.73	2,955.27	1,947.10	1,802.41	1,938.97	873.87	908.65	22,956.44
TOTAL ASH PRODUCED	21,151.86	13,018.08	13,331.85	20,508.70	15,882.00	14,205.60	22,732.82	14,977.72	13,864.67	14,915.13	6,722.06	6,989.61	176,588.01
ASH SLUICED TO POND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ASH LANDFILLED *	33,099.37	24,825.12	15,782.71	20,557.95	16,109.47	24,058.21	25,373.08	22,259.94	20,070.15	20,901.84	7,948.93	4,345.22	233,503.76
CENOSPHERES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ASH BENEFICIAL REUSE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
STRUCTURAL FILL ASH	9,056.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TEMPORARY ASH STORAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MARSHALL STATION													
DRY FLY ASH PRODUCED	26,424.92	17,322.00	19,735.39	15,963.89	16,936.24	25,100.98	31,730.68	27,939.32	19,349.41	22,508.16	22,402.27	23,386.95	267,556.15
DRY BOTTOM ASH PRODUCED	4,663.22	3,056.82	3,482.72	2,817.16	2,988.75	4,429.59	5,599.53	4,930.47	3,414.60	3,972.03	3,953.34	4,127.11	47,215.79
TOTAL ASH PRODUCED	31,088.14	20,378.83	23,218.10	18,781.05	19,924.99	29,530.57	37,330.22	32,869.79	22,764.01	26,480.19	26,355.61	27,514.06	314,771.94
ASH SLUICED TO POND	4,663.22	3,056.82	3,482.72	2,817.16	2,988.75	4,429.59	5,599.53	4,930.47	3,414.60	3,972.03	3,953.34	4,127.11	47,215.79
ASH LANDFILLED *	38,414.43	26,400.90	29,118.70	21,403.17	26,402.20	40,062.61	46,098.72	43,458.20	26,454.49	31,874.92	30,777.95	35,482.25	395,948.54
Fly Ash Sales	700.63	3,651.72	2,073.63	26.55	49.31	0.00	0.00	0.00	1,082.20	2,747.06	3,239.47	810.88	12,786.66
ASH BENEFICIAL REUSE	4,097.28	7,114.85	4,196.25	707.28	1,611.82	2,029.69	1,097.52	2,196.04	3,372.57	4,927.44	4,811.74	2,090.06	37,210.07
STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED STRUCTURAL FILL ASH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TEMPORARY ASH STORAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Ash Produced	**895,849**	**percent reuse**	**39%**
Production Ash Reused	**346,900**		
Ash Sluiced	96,081		
Ash Landfilled	720,772		
Ash to Structural Fill	0		
Reclaimed Ash for Beneficial Reuse	0		

DEP - 2017													
ASHEVILLE STATION													
DRY FLY ASH PRODUCED	5,748.19	3,366.01	4,617.36	2,566.12	2,399.28	3,615.61	4,888.30	3,921.04	1,810.48	2,831.70	1,976.28	4,258.29	41,998.66
DRY BOTTOM ASH PRODUCED	728.64	841.50	1,154.34	641.53	599.82	903.90	1,222.07	980.26	452.62	707.93	494.07	1,064.57	9,791.26
TOTAL ASH PRODUCED	6,476.83	4,207.51	5,771.71	3,207.65	2,999.10	4,519.52	6,110.37	4,901.30	2,263.10	3,539.63	2,470.35	5,322.86	51,789.92

ASH SLUICED TO POND		6,476.83	4,207.51	5,771.71	3,207.65	2,999.10	4,519.52	6,110.37	4,901.30	2,263.10	3,539.63	2,470.35	5,322.86	51,789.92
ASH LANDFILLED *		42,948.00	40,908.00	45,883.00	34,265.00	19,441.00	40,544.00	34,635.00	36,147.00	25,538.00	26,062.00	28,172.00	48,652.00	443,305.00
CENOSPHERES		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ASH BENEFICIAL REUSE		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
STRUCTURAL FILL ASH		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED ASH		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED TO STRUCTURAL FILL ASH		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TEMPORARY ASH STORAGE		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MAYO STATION														
DRY FLY ASH PRODUCED		4,139.93	2,631.78	4,893.54	1,729.87	924.58	4,714.66	6,994.95	7,087.42	872.14	1,316.21	0.00	5,230.44	40,535.52
DRY BOTTOM ASH PRODUCED		524.78	657.95	1,223.38	432.47	231.14	1,178.67	1,748.74	1,771.86	218.03	329.05	0.00	1,307.61	9,623.68
TOTAL ASH PRODUCED		4,664.72	3,289.73	6,116.92	2,162.34	1,155.72	5,893.33	8,743.69	8,859.28	1,090.17	1,645.27	0.00	6,538.04	50,159.20
ASH SLUICED TO POND		524.78	657.95	1,223.38	432.47	231.14	1,178.67	1,748.74	1,771.86	218.03	329.05	0.00	1,307.61	9,623.68
ASH LANDFILLED *		5,067.78	5,467.46	4,961.15	4,619.17	2,114.14	7,604.00	9,749.22	11,102.20	2,571.67	0.00	0.00	0.00	53,256.79
CENOSPHERES		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ASH BENEFICIAL REUSE		0.00	451.42	46.40	90.31	0.00	0.00	0.00	0.00	0.00	21.80	0.00	0.00	609.93
STRUCTURAL FILL ASH		0.00	0.00	0.00	0.00	0.00	21.28	0.00	0.00	0.00	0.00	0.00	0.00	21.28
RECLAIMED ASH		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED ASH TO STRUCTURAL FILL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TEMPORARY ASH STORAGE		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROXBORO STATION														
DRY FLY ASH PRODUCED		14,920.62	2,823.78	11,832.69	9,750.31	8,339.45	19,203.35	35,510.58	30,362.92	20,486.68	11,498.44	11,544.59	20,911.50	199,655.07
DRY BOTTOM ASH PRODUCED		1,891.35	705.95	2,958.17	2,437.58	2,084.86	4,800.84	8,877.65	7,590.73	5,121.67	2,874.61	2,886.15	5,227.88	48,074.96
TOTAL ASH PRODUCED		16,811.97	3,529.73	14,790.86	12,187.89	10,424.31	24,004.18	44,388.23	37,953.65	25,608.35	14,373.05	14,430.74	26,139.38	247,730.02
ASH SLUICED TO POND		1,891.35	705.95	2,958.17	2,437.58	2,084.86	4,800.84	8,877.65	7,590.73	5,121.67	2,874.61	2,886.15	5,227.88	48,074.96
ASH LANDFILLED *		14,178.16	6,098.63	8,909.10	0.00	0.00	0.00	51,563.62	41,682.69	25,409.35	12,234.86	14,043.91	21,112.75	245,845.33
CENOSPHERES		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ASH BENEFICIAL REUSE		6,294.05	6,865.17	6,248.70	2,305.00	4,607.20	4,580.86	4,386.03	8,835.59	5,788.37	10,216.11	11,082.24	10,111.74	81,382.77
STRUCTURAL FILL ASH		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED ASH		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RECLAIMED ASH TO STRUCTURAL FILL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TEMPORARY ASH STORAGE		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

DEP

Ash Produced		**349,679**				**percent reuse**		**23%**						
Production Ash Reused		**81,993**												
Ash Sluiced		150,024												
Ash Landfilled		742,407												
Ash to Structural Fill		21												
Reclaimed Ash for Beneficial Reuse		0												
Combined		**1,245,528**				**percent reuse**		**34%**						
Production Ash Reused		**428,893**												
DEP & DEC	Total CCP Produced	205,099	115,490	196,978	182,369	182,518	237,444	360,817	321,788	189,994	149,954	125,239	181,423	2,449,115
	Total CCP Reused	158,110	124,842	140,953	149,945	165,308	180,372	168,900	198,210	155,099	170,276	156,683	149,953	1,918,651
	% Ash Reuse	27%	51%	24%	34%	49%	41%	25%	37%	55%	75%	76%	53%	42%
	% Gypsum Reuse	131%	156%	126%	133%	134%	113%	69%	84%	105%	153%	177%	120%	116%
	% Total CCP Reuse	77%	108%	72%	82%	91%	76%	47%	62%	82%	114%	125%	83%	78%

2017 CCP December Utilization Station Health Final w 2016 correctionsJWJ

* Ash Landfilled represent the moist tons of CCR's weighed and placed in the landfills monthly.

WASTE	REUSE	RECLAIM	TOTAL GYPSUM	TEMPORARY ST(	All units in tons

DEC - 2016	January	February	March	April	May	June	July	August	September	October	November	December	YTD
ALLEN STATION													
DRY FLY ASH PRODUCED	5,145	5,976	3,603	1,169	262	6,750	13,580	14,335	8,844	1,828	0	2,222	63,714
DRY BOTTOM ASH PRODUCED	1,286	1,494	901	292	65	1,688	3,395	3,584	2,211	457	0	555	15,929
TOTAL ASH PRODUCED	6,432	7,470	4,504	1,461	327	8,438	16,975	17,919	11,055	2,285	0	2,777	79,643
ASH SLUICED TO POND	1,286	1,494	901	292	65	1,688	3,395	3,584	2,211	457	0	555	15,929
ASH LANDFILLED *	9,371	8,196	6,279	1,673	0	9,098	21,039	23,095	11,850	4,484	2,104	2,695	99,882
CENOSPHERES	0	0	0	0	0	0	0	0	0	0	0	0	0
ASH BENEFICIAL REUSE	0	0	203	0	0	0	0	0	203	0	0	0	407
STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED TO STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY ASH STORAGE	0	0	0	0	0	0	0	0	0	0	0	0	0
BELEWS CREEK STATION													
DRY FLY ASH PRODUCED	40,446	24,995	8,976	12,012	21,045	40,799	36,523	43,867	48,809	26,262	19,037	25,265	348,038
DRY BOTTOM ASH PRODUCED	4,999	3,089	1,109	1,485	2,601	5,043	4,514	5,422	6,033	3,246	2,353	3,123	43,016
TOTAL ASH PRODUCED	45,445	28,084	10,086	13,497	23,646	45,842	41,037	49,289	54,841	29,508	21,390	28,388	391,054
ASH SLUICED TO POND	4,999	3,089	1,109	1,485	2,601	5,043	4,514	5,422	6,033	3,246	2,353	3,123	43,016
ASH LANDFILLED *	4,052	14,440	1,141	0	0	6,226	19,685	9,803	24,295	9,013	2,402	5,863	96,922
CENOSPHERES	0	0	0	0	0	0	0	0	0	0	0	0	0
ASH BENEFICIAL REUSE	18,784	20,383	22,364	12,460	12,056	30,048	25,245	34,962	29,274	27,198	35,919	21,389	290,083
STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY ASH STORAGE	0	0	0	0	0	0	0	0	0	0	0	0	0
CLIFFSIDE STATION													
DRY FLY ASH PRODUCED	5,751	5,876	97	0	5,869	18,014	24,223	16,849	7,850	5,274	8,526	21,257	119,587
DRY BOTTOM ASH PRODUCED	859	878	14	0	877	2,692	3,620	2,518	1,173	788	1,274	3,176	17,869
TOTAL ASH PRODUCED	6,611	6,754	111	0	6,746	20,706	27,842	19,367	9,023	6,062	9,801	24,433	137,456
ASH SLUICED TO POND	1,472	2,776	111	0	877	7,135	13,142	6,527	1,173	2,021	2,318	9,432	46,985
ASH LANDFILLED *	2,701	0	0	0	6,298	23,717	20,506	21,803	11,161	9,637	5,141	27,084	128,049
CENOSPHERES	0	0	0	0	0	0	0	0	0	0	0	0	0
ASH BENEFICIAL REUSE	2,701	10,844	0	0	0	0	0	0	0	0	0	0	13,546
STRUCTURAL FILL ASH	852	1,015	0	0	751	3,358	3,162	3,398	1,614	981	1,816	4,050	20,997
RECLAIMED ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY ASH STORAGE	0	0	0	0	0	0	0	0	0	0	0	0	0
MARSHALL STATION													
DRY FLY ASH PRODUCED	30,253	22,370	19,482	18,396	14,602	28,041	35,788	31,835	21,799	25,408	14,538	24,533	287,047
DRY BOTTOM ASH PRODUCED	5,339	3,948	3,438	3,246	2,577	4,948	6,316	5,618	3,847	4,484	2,566	4,329	50,655
TOTAL ASH PRODUCED	35,592	26,318	22,920	21,642	17,179	32,990	42,104	37,453	25,646	29,891	17,104	28,862	337,702
ASH SLUICED TO POND	5,339	3,948	3,438	3,246	2,577	4,948	6,316	5,618	3,847	4,484	2,566	4,329	50,655
ASH LANDFILLED *	40,743	35,814	28,184	23,300	19,212	45,926	48,723	51,149	29,464	33,032	23,569	44,833	423,950
Fly Ash Sales	0	0	0	1,029	2,750	1,786	600	769	1,026	2,492	1,462	1,361	13,275
ASH BENEFICIAL REUSE	2,229	2,152	1,564	3,587	3,666	4,226	2,690	3,721	3,441	6,211	6,846	4,407	44,739
STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY ASH STORAGE	0	0	0	0	0	0	0	0	0	0	0	0	0

Ash Produced	**945,854**	**percent reuse**	**38%**
Production Ash Reused	**362,050**		
Ash Sluiced	156,584		

Ash Landfilled	748,803
Ash to Structural Fill	20,997
Reclaimed Ash for Beneficial Reuse	0

DEP - 2016													
ASHEVILLE STATION													
DRY FLY ASH PRODUCED	5,439	5,336	2,924	1,917	2,415	3,321	6,354	7,883	3,370	2,355	4,299	5,730	51,342
DRY BOTTOM ASH PRODUCED	690	1,334	731	479	604	830	1,588	1,971	842	589	1,075	1,433	12,165
TOTAL ASH PRODUCED	6,129	6,670	3,655	2,396	3,018	4,151	7,942	9,854	4,212	2,944	5,373	7,163	63,507
ASH SLUICED TO POND	6,129	6,670	3,655	2,396	3,018	4,151	7,942	9,854	4,212	2,944	5,373	7,163	63,507
ASH LANDFILLED *	0	0	0	0	0	0	0	0	0	0	0	0	0
CENOSPHERES	0	0	0	0	0	0	0	0	0	0	0	0	0
ASH BENEFICIAL REUSE	0	0	0	0	0	0	0	0	0	0	0	0	0
STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED TO STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY ASH STORAGE	0	0	0	0	0	0	0	0	0	0	0	0	0
MAYO STATION													
DRY FLY ASH PRODUCED	8,987	5,932	1,802	2,018	6,920	8,687	13,661	13,507	12,525	3,405	4,873	3,040	85,358
DRY BOTTOM ASH PRODUCED	1,139	1,483	451	505	1,730	2,172	3,415	3,377	3,131	851	1,218	760	20,232
TOTAL ASH PRODUCED	10,126	7,415	2,253	2,523	8,650	10,859	17,077	16,884	15,656	4,256	6,091	3,800	105,590
ASH SLUICED TO POND	0	0	0	0	0	0	0	0	0	0	0	0	0
ASH LANDFILLED *	9,420	5,093	2,958	1,214	5,896	10,278	13,912	16,766	14,589	4,868	6,809	5,926	97,730
CENOSPHERES	0	0	0	0	0	0	0	0	0	0	0	0	0
ASH BENEFICIAL REUSE	276	950	253	0	301	0	0	0	0	0	675	0	2,455
STRUCTURAL FILL ASH	0	67	25	42	0	138	144	136	43	44	0	0	640
RECLAIMED ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED ASH TO STRUCTURAL FILL	0	0	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY ASH STORAGE	0	0	0	0	0	0	0	0	0	0	0	0	0
ROXBORO STATION													
DRY FLY ASH PRODUCED	32,792	18,547	2,006	9,423	11,787	34,943	45,138	38,708	29,908	19,192	6,506	12,008	260,957
DRY BOTTOM ASH PRODUCED	4,157	4,637	502	2,356	2,947	8,736	11,284	9,677	7,477	4,798	1,626	3,002	61,198
TOTAL ASH PRODUCED	36,949	23,183	2,508	11,779	14,734	43,679	56,422	48,386	37,384	23,990	8,132	15,010	322,155
ASH SLUICED TO POND	4,157	4,637	502	2,356	2,947	8,736	11,284	9,677	7,477	4,798	1,626	3,002	61,198
ASH LANDFILLED *	29,132	23,051	4,441	7,499	13,304	38,736	54,017	46,348	40,676	34,034	9,133	36,096	336,468
CENOSPHERES	0	0	0	0	0	0	0	0	0	0	0	0	0
ASH BENEFICIAL REUSE	7,475	11,931	4,132	1,919	8,762	11,428	14,099	12,038	9,082	9,975	2,558	3,833	97,231
STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED ASH TO STRUCTURAL FILL	0	0	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY ASH STORAGE	0	0	0	0	0	0	0	0	0	0	0	0	0

DEP			
Ash Produced	**491,252**	**percent reuse**	**20%**
Production Ash Reused	**99,686**		

Ash Sluiced		230,295													
Ash Landfilled *		434,198													
Ash to Structural Fill		640													
Reclaimed Ash for Beneficial Reuse		0													
Combined		**1,437,106**				**percent reuse**		**32%**							
Production Ash Reused		**461,736**													
DEP & DEC	Total CCP Produced	264,509	213,060	100,026	89,106	136,286	306,452	402,028	400,233	326,645	216,450	143,589	219,155	2,817,538	
Portion added 6/1/2017 as a results of a request for the backup to the summary document JWJ	Total CCP Reused	145,297	188,534	151,834	130,162	147,421	196,564	191,350	218,850	183,255	173,736	180,400	182,002	2,089,403	
	% Ash Reuse	22%	45%	62%	36%	38%	31%	22%	28%	28%	47%	73%	32%	34%	
	% Gypsum Reuse	96%	132%	228%	310%	192%	104%	75%	81%	82%	108%	173%	135%	116%	
	% Total CCP Reuse	55%	88%	152%	146%	108%	64%	48%	55%	56%	80%	126%	83%	74%	74.16%
Data from Beneficial Reuse File Server 2016 CCP Utilization DOE Index.xlsm															

* Ash Landfilled represent the moist tons of CCR's weighed and placed in the landfills monthly.

DEC - 2015	January	February	March	April	May	June	July	August	September	October	November	December	YTD
ALLEN STATION													
TOTAL ASH PRODUCED	6,704	20,818	4,101	0	3,031	15,995	45,504	16,883	3,823	899	72	695	118,524
ASH SLUICED TO POND	1,341	4,164	820	0	606	3,199	2,528	1,993	765	180	14	139	15,748
ASH LANDFILLED *	8,846	24,409	7,215	0	1,543	19,996	26,725	20,702	3,929	274	0	695	114,334
CENOSPHERES	0	0	0	0	0	0	0	0	0	0	0	0	0
ASH BENEFICIAL REUSE	0	0	0	0	0	100	0	0	0	0	0	0	100
STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED TO STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY ASH STORAGE	0	0	0	0	0	0	0	0	0	0	0	0	0
BELEWS CREEK STATION													
TOTAL ASH PRODUCED	45,725	44,876	43,784	19,551	29,515	42,662	47,663	35,964	35,666	31,722	24,913	19,533	421,574
ASH SLUICED TO POND	4,875	4,936	4,816	1,937	3,247	4,693	5,243	3,281	3,923	3,489	2,668	2,149	45,258
ASH LANDFILLED *	8,054	34,166	15,195	3,042	2,824	3,030	7,449	5,731	0	4,357	4,165	351	88,365
CENOSPHERES	0	0	0	0	0	0	0	0	0	0	0	0	0
ASH BENEFICIAL REUSE	15,061	11,186	26,639	30,599	30,253	49,099	34,271	35,486	31,310	21,639	21,189	29,013	335,746
STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY ASH STORAGE	0	0	0	0	0	0	0	0	0	0	0	0	0
CLIFFSIDE STATION													
TOTAL ASH PRODUCED	16,224	30,010	8,427	0	4,300	19,050	27,478	25,279	19,621	1,576	0	682	152,646
ASH SLUICED TO POND	1,905	10,112	1,739	0	-166	6,748	8,048	2,852	1,159	-40	-210	682	32,828
ASH LANDFILLED *	23,273	28,282	14,620	721	9,023	15,636	30,918	32,982	25,806	7,241	210	0	188,712
CENOSPHERES	0	0	0	0	0	0	0	0	0	0	0	0	0
ASH BENEFICIAL REUSE	24	0	0	0	0	8,500	0	0	0	0	0	0	8,524
STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY ASH STORAGE	0	0	0	0	0	0	0	0	0	0	0	0	0
MARSHALL STATION													
TOTAL ASH PRODUCED	16,587	23,008	26,410	17,585	23,404	36,159	33,134	33,539	19,694	14,308	20,477	16,214	280,520
ASH SLUICED TO POND	2,488	3,451	3,962	2,638	3,511	5,424	4,970	5,031	2,954	2,146	3,071	2,432	42,078
ASH LANDFILLED *	49,968	32,959	42,631	20,495	20,590	44,189	42,051	41,155	26,811	17,470	24,934	26,654	389,908
CENOSPHERES	0	0	0	0	0	0	0	0	0	0	0	0	0
ASH BENEFICIAL REUSE	0	0	288	2,504	3,114	8,950	3,015	3,591	2,988	3,612	1,439	2,064	31,565
STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY ASH STORAGE	0	0	0	0	0	0	0	0	0	0	0	0	0

Ash Produced	**973,264**	**percent reuse**	**38.63%**
Production Ash Reused	**375,934**		
Ash Sluiced	135,912		
Ash Landfilled	781,320		
Ash to Structural Fill	0		
Reclaimed Ash for Beneficial Reuse	0		

DEP - 2015													
ASHEVILLE STATION													
TOTAL ASH PRODUCED	6,728	7,741	6,301	4,691	5,140	6,297	7,477	6,188	5,512	4,488	6,436	3,901	70,900
ASH SLUICED TO POND	6,728	7,741	6,301	4,691	5,140	6,297	7,477	6,188	5,512	4,488	6,436	3,901	70,900
ASH LANDFILLED *	0	0	0	0	0	0	0	6,188	5,512	4,488	6,436	3,901	26,525
CENOSPHERES	0	0	0	0	0	0	0	0	0	0	0	0	0
ASH BENEFICIAL REUSE	0	0	0	0	0	0	0	0	0	0	0	0	0
STRUCTURAL FILL ASH	6,728	7,741	6,301	4,691	5,140	6,297	7,477	0	0	0	0	0	44,374
RECLAIMED ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED TO STRUCTURAL FILL ASH	45,458	30,696	65,962	59,564	63,143	78,492	10,802	0	0	0	0	0	354,117
TEMPORARY ASH STORAGE	0	0	0	0	0	0	0	0	0	0	0	0	0
MAYO STATION													
TOTAL ASH PRODUCED	17,969	12,483	5,380	16,148	17,092	17,152	18,239	16,278	10,647	6,377	8,112	2,476	148,353
ASH SLUICED TO POND	2,022	2,497	1,076	3,230	3,418	3,430	3,648	3,256	2,129	1,275	1,622	495	28,098
ASH LANDFILLED *	18,530	17,886	4,717	18,346	23,362	25,445	25,794	14,287	12,232	5,481	14,039	3,109	183,229
CENOSPHERES	0	0	0	0	0	0	0	0	0	0	0	0	0
ASH BENEFICIAL REUSE	0	0	0	0	0	929	1,385	871	868	261	317	2,700	7,331
STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED ASH TO STRUCTURAL FILL	0	0	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY ASH STORAGE	0	0	0	0	0	0	0	0	0	0	0	0	0
ROXBORO STATION													
TOTAL ASH PRODUCED	45,708	52,158	34,987	13,164	33,547	46,040	51,986	45,829	22,507	16,601	9,865	10,931	383,323
ASH SLUICED TO POND	5,142	10,432	6,997	2,633	6,709	9,208	10,397	9,166	4,501	3,320	1,973	2,186	72,665
ASH LANDFILLED *	45,434	49,669	35,967	9,694	26,878	45,782	51,645	47,136	17,570	19,155	14,890	6,323	370,142
CENOSPHERES	0	0	0	0	0	0	0	0	0	0	0	0	0
ASH BENEFICIAL REUSE	16,265	11,958	15,861	13,282	13,001	19,087	20,249	15,110	13,730	9,660	6,886	7,848	162,936
STRUCTURAL FILL ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED ASH	0	0	0	0	0	0	0	0	0	0	0	0	0
RECLAIMED ASH TO STRUCTURAL FILL	0	0	0	0	0	0	0	0	0	0	0	0	0
TEMPORARY ASH STORAGE	0	0	0	0	0	0	0	0	0	0	0	0	0

Ash Produced	**602,576**	**percent reuse**	**28%**
Production Ash Reused	**170,267**		
Ash Sluiced	171,663		
Ash Landfilled	579,896		
Ash to Structural Fill	44,374		
Reclaimed Ash for Beneficial Reuse	354,117		

* Ash Landfilled represent the moist tons of CCR's weighed and placed in the landfills monthly.

Duke Energy Carolinas

Breakdown of 2015-September 30, 2018 Compliance Spend by site

All numbers presented on a system basis

Site	2015 - September 30,2018 compliance spend	Type of spend	Legal justification for spend	Spend justification
Allen	$ 53,734,588	Ash closure development engineering; closure design drawings; wetland delineation; interstitial water and landfill leachate work; CAMA wells; alternate spillway; dam stability; groundwater; planning and overheads.	40 CFR 257.102(b) 40 CFR 257.60 40 CFR 257.101(b)(1) CAMA §§ 130A-309.213 and .214 HB 630 § 130A-309.211(c1)	Allen is subject to CCR rule provisions requiring basin closure. 40 CFR § 257.102(b) required a written closure plan by October 17, 2016. On October 11, 2018, it was determined that both ash basins at the Allen plant did not meet the uppermost aquifer location restriction (40 CFR § 257.60). This results in the Allen station basins being required to commence closure pursuant to 40 CFR § 257.101(b)(1)(i) no later than October 31, 2020. The Allen plant is anticipating a low-risk ranking under CAMA in light of Duke Energy's completion of the dam safety activities required under NCGS § 130A-309.213(d)(1)b. and establishment of the permanent water supplies required under NCGS §§ 130A-309.211(c1) and 130A-309.213(d)(1)a. Engineering and project planning at the current time are needed to synchronize work between all of the
Belews Creek	$ 51,150,499	Closure engineering; planning and overheads; CAMA and CCR wells; dam stability; groundwater activities.	40 CFR 257.102(b) 40 CFR 257.60 40 CFR 257.61 40 CFR 257.101(b)(1) CAMA §§ 130A-309.213 and .214 HB 630 § 130A-309.211(c1)	Belews Creek is subject to CCR rule provisions requiring basin closure. 40 CFR § 257.102(b) required a written closure plan by October 17, 2016. On October 12, 2017, it was determined that the ash basin at the Belews Creek plant did not meet the wetlands location restriction (40 CFR § 257.61) and the uppermost aquifer location restriction (40 CFR § 257.60). This results in the Belews Creek ash basin being required to commence closure pursuant to 40 CFR § 257.101(b)(1) on April 12, 2019. The Belews Creek plant is anticipating a low-risk ranking under CAMA in light of Duke Energy's completion of the dam safety activities required under NCGS § 130A-309.213(d)(1)b. and establishment of the permanent water supplies required under NCGS §§ 130A-309.211(c1) and 130A-

Duke Energy Carolinas

Breakdown of 2015-September 30, 2018 Compliance Spend by site

All numbers presented on a system basis

Site	2015 - September 30,2018 compliance spend	Type of spend	Legal justification for spend	Spend justification
Buck	$ 88,125,408	Closure plan development; wetlands delineation; dewatering; planning and overheads; CCR and CAMA wells; alternate spillway; beneficiation facility; groundwater; SW/PW reroute	40 CFR 257.102(b) 40 CFR 257.60 40 CFR 257.61 40 CFR 257.101(b) CAMA § 130A-309.213 and .214 HB630 §§ 130A-309.216	Buck is subject to CCR rule provisions requiring basin closure. 40 CFR § 257.102(b) required a written closure plan by October 17, 2016. On October 15, 2018, it was determined that the Additional Primary Pond and the Secondary Pond at Buck did not meet the wetlands location restriction (40 CFR § 257.61) and the uppermost aquifer location restriction (40 CFR § 257.60). This results in the additional primary pond and the secondary pond at Buck being required to commence closure pursuant to 40 CFR § 257.101(b)(1) on April 15, 2019. On October 15, 2018, it was also determined that the primary pond at Buck did not meet the uppermost aquifer location restriction (40 CFR § 257.60). This results in the Primary Pond at Buck being required to commence closure pursuant to 40

Duke Energy Carolinas

Breakdown of 2015-September 30, 2018 Compliance Spend by site

All numbers presented on a system basis

Site	2015 - September 30,2018 compliance spend	Type of spend	Legal justification for spend	Spend justification
Cliffside	$ 71,472,788	Ash excavation and transport (Inactive ash basin); landfill activities to support excavation; planning and overheads; closure engineering; CAMA and CCR wells; alternate spillway; landfill; groundwater	40 CFR 257.102(b) 40 CFR 257.60 40 CFR 257.61 40 CFR 257.101(b)(1) CAMA §§ 130A-309.213 and .214 HB 630 § 130A-309.211(c1)	Cliffside is subject to CCR rule provisions regarding basin closure. 40 CFR § 257.102(b) required a written closure plan by October 17, 2016. On October 11, 2018, it was determined that the Active Ash Basin and the Inactive Unit 5 Basin at Cliffside did not meet the wetlands location restriction (40 CFR § 257.61) and the uppermost aquifer location restriction (40 CFR § 257.60). This results in the Active Ash Basin and the Inactive Unit 5 Basin at Cliffside being required to commence closure pursuant to 40 CFR § 257.101(b)(1) on April 11, 2019. On November 3, 2016, the placement of wastestreams in the Inactive Units 1-4 Ash Basin ceased and closure of the basin commenced pursuant to 40 CFR § 257.102(e)(1)(i). The Cliffside plant is anticipating a low-risk ranking under CAMA in light of Duke Energy's completion of the dam safety activities required under NCGS § 130A-309.213(d)(1)b. and establishment of the permanent water supplies required under NCGS §§ 130A-309.211(c1) and 130A-

Duke Energy Carolinas

Breakdown of 2015-September 30, 2018 Compliance Spend by site

All numbers presented on a system basis

Site	2015 - September 30,2018 compliance spend	Type of spend	Legal justification for spend	Spend justification
Dan River	$ 169,526,789	Ash excavation and transportation; purchase of land rights; dewatering; landfill; stormwater diversion; leachate removal; permits; planning and overheads; landfill development; closure plan; CAMA wells; dam stability; wastewater treatment; groundwater	40 CFR 257.102(b) 40 CFR 257.60 40 CFR 257.101(b)(1) 40 CFR 257.102(e)(1) CAMA §§ 3.(b) and 3.(c) Order Granting Motion for Partial Summary Judgment dated June 1, 2016 (No. 13-CVS-4061)	Dan River is subject to CCR rule provisions regarding basin closure. 40 CFR § 257.101(b) required a written closure plan by October 17, 2016. On October 11, 2018, it was determined that the Secondary Ash Basin at Dan River did not meet the uppermost aquifer location restriction (40 CFR § 257.60). This results in the basin being required to commence closure pursuant to 40 CFR § 257.101(b)(1)(i) no later than October 31, 2020. The last volume of CCR for beneficial use was removed from the Dan River Primary Ash Basin on April 4, 2018, and, within 30 days, the basin commenced closure pursuant to 40 CFR § 257.102(e)(1)(ii). Pursuant to ¶ 5.e. of the Order Granting Motion for Partial Summary Judgment dated June 1, 2016 (No. 13-CVS-4061), a written Site Analysis and Removal Plan was due by December 31, 2016.
Marshall	$ 44,272,414	Closure plan development; wetlands delineation report; CAMA wells; landfill activities; alternate spillway; dam stability; groundwater; planning and overheads.	40 CFR 257.102(b) 40 CFR 257.60 40 CFR 257.61 40 CFR 257.101(b)(1) CAMA §§ 130A-309.213 and .214 HB 630 § 130A-309.211(c1)	Marshall is subject to CCR rule provisions regarding basin closure. 40 CFR § 257.102(b) required a written closure plan by October 17, 2016. On October 12, 2018, it was determined that the ash basin at Marshall did not meet the wetlands location restriction (40 CFR § 257.61) and the uppermost aquifer location restriction (40 CFR § 257.60). This results in the Marshall ash basin being required to commence closure pursuant to 40 CFR § 257.101(b)(1) on April 12, 2019. The Marshall plant is anticipating a low-risk ranking under CAMA in light of Duke Energy's completion of the dam safety activities required under NCGS § 130A-309.213(d)(1)b. and establishment of the permanent water supplies required under NCGS §§ 130A-309.211(c1) and 130A-309.213(d)(1)a.

Duke Energy Carolinas

Breakdown of 2015-September 30, 2018 Compliance Spend by site

All numbers presented on a system basis

Site	2015 - September 30,2018 compliance spend	Type of spend	Legal justification for spend	Spend justification
Riverbend	$ 322,350,347	Contractor mobilization; Brickhaven site preparation; Riverbend site preparation; excavation of CCR; transportation of CCR to Marshall, R&B Landfill, and Brickhaven; soil handling; interstitial water treatment equipment; engineering technical support; CAMA wells and groundwater	CAMA §§ 3.(b) and 3.(c) Order Granting Motion for Partial Summary Judgment dated June 1, 2016 (13-CVS-9352)	Riverbend is not currently subject to CCR rule provisions regarding basin closure. However, in response to the United States Court of Appeals for the District of Columbia Circuit's August 21, 2018 decision in *USWAG v. EPA* (No. 15-1219), EPA is expected to undertake a rulemaking that would regulate inactive impoundments at closed power plants, including the Riverbend basins. Pursuant to ¶ 5.e. of the Order Granting Motion for Partial Summary Judgment dated June 1, 2016 (13-CVS-9352), a written Site Analysis and Removal Plan was due by December 31, 2016. Sections 3.(b) and 3.(c) of CAMA require excavation of the Riverbend basins, with the ash disposed of in either
W.S. Lee	$ 99,145,771	Contractor mobilization; readiness reviews; closure, drainage and road improvements; water treatment system; dewatering operations; ash removal; closure engineering; planning and overheads	40 CFR 257.102(b) 40 CFR 257.60 40 CFR 257.61 40 CFR 257.101(b)(1) Consent Agreement dated Sept. 29, 2014 (14-13-HW)	W.S. Lee is subject to CCR rule provisions regarding basin closure. 40 § CFR 257.102(b) required a written closure plan by October 17, 2016. On October 11, 2018, it was determined that the Secondary Ash Basin at W.S. Lee did not meet the wetlands location restriction (40 CFR § 257.61) and the uppermost aquifer location restriction (40 CFR. § 257.60). This results in the Secondary Ash Basin at W.S. Lee being required to commence closure pursuant to 40 CFR § 257.101(b)(1) on April 11, 2019. On October 11, 2018, it was determined that the Primary Ash Basin at W.S. Lee did not meet the uppermost aquifer location restriction (40 CFR § 257.60). This results in the Primary Ash Basin at W.S. Lee being required to commence closure pursuant to 40 CFR § 257.101(b)(1)
Total - All Sites	**$ 899,778,604**			

Duke Energy Carolinas				
Breakdown of 2015-September 30, 2018 Compliance Spend by site				
All numbers presented on a system basis				
Site	**2015 - September 30,2018 compliance spend**	**Type of spend**	**Legal justification for spend**	**Spend justification**
Note:				
After the entry of summary judgment the HB630 amendments to CAMA codified this requirement. Session Law 2016-95, Section 3(a) and (b) (excerpted				
SECTION 3.(a) Notwithstanding G.S. 130A-309.213 or G.S. 130A-309.214, as amended by Section 1 of this act, and except as otherwise preempted by the				
(1) Coal combustion residuals surface impoundments located at the H.F. Lee Steam Station, owned and operated by Duke Energy Progress, and located in Wayn				
(2) Coal combustion residuals surface impoundments located at the Cape Fear Steam Station, owned and operated by Duke Energy Progress, and located in Cha				
(3) Coal combustion residuals surface impoundments located at the Weatherspoon Steam Station, owned and operated by Duke Energy Progress, and located ir				
SECTION 3.(b) The impoundments identified in subsection (a) of this section shall be closed as follows:				
(1) Impoundments located in whole above the seasonal high groundwater table shall be dewatered. Impoundments located in whole or in part beneath the				
seasonal high groundwater table shall be dewatered to the maximum extent practicable.				
(2) All coal combustion residuals shall be removed from the impoundments and transferred for (i) disposal in a coal combustion residuals landfill, industrial				
(3) If restoration of groundwater quality is degraded as a result of the impoundment, corrective action to restore groundwater quality shall be implemented by				

BEFORE
THE PUBLIC SERVICE COMMISSION
OF SOUTH CAROLINA
DOCKET NO. 2018-319-E

IN RE: Application of Duke Energy Carolinas, LLC for Adjustments in Electric Rate Schedules and Tariffs and Request for an Accounting Order	))))	CERTIFICATE OF SERVICE

This is to certify that I, Toni Hawkins, a paralegal with the law firm of Robinson Gray Stepp & Laffitte, LLC have this day served copies of **Duke Energy Carolinas, LLC's Errata to the Application and Direct Testimony of Jon F. Kerin and Christopher M. Fallon** in the foregoing matter via electronic mail as follows:

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Dated at Columbia, South Carolina this 18th day of January, 2019.

Toni C. Hawkins